



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,950	11/08/2006	Roger William Frank Ashton	10557/323978	1482
30559	7590	11/07/2007	EXAMINER	
CHIEF PATENT COUNSEL			WALKER, AMANDA H	
SMITH & NEPHEW, INC.			ART UNIT	PAPER NUMBER
1450 BROOKS ROAD			4134	
MEMPHIS, TN 38116				

  

MAIL DATE	DELIVERY MODE
11/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/559,950	ASHTON ET AL.
	Examiner	Art Unit
	Amanda H. Walker	4134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 December 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-26 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 09 December 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>11-08-06</u> .	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: it does not include a subheading for "Brief Description of the Drawing".

Appropriate correction is required because the absence of this subheading would cause a printer error if it were to become a patent.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 14-15, 17, and 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Hauser et al. (U.S. Patent No. 5,549,692).

Regarding Claims 1-7, 19, and 22: Hauser et al. teaches a fixing assembly comprising; a component 3 having a surface with a male location feature that has portions that are flat and/or conical in profile, a fixing member 11 having a female location feature 17 and apertures 9 and 16, and fixing screws 8 and 13 that go through the apertures (FIG. 1, 2a-c, and 6). One of the fixing screws 8 is external to the surface of the component (FIG. 1) and secures the component to a second component. The male and female

features have corresponding undercuts (FIG. 1) that form a dovetail joint to secure the fixing member to the surface of the component.

Regarding Claims 14: Hauser et al. teaches that the surface location feature is at least partly located on a rim of the surface (FIG. 1).

Regarding Claim 15: Hauser et al. teaches that the fixing screw 8 has a head (FIG. 1).

Regarding Claims 17: Hauser et al. teaches that the surface of the component has a threaded portion 12 adjacent a location feature

Regarding Claims 20 and 21: Hauser et al. teaches that the component is a prosthetic ball and socket joint cup, specifically an acetabular cup (abstract).

Claims 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Hauser et al. (U.S. Patent No. 5,549,692).

Regarding Claims 23, 24 and 26: Hauser et al. teaches a kit of parts for a fixing assembly comprising; at least one component 3 having a surface with a male location feature that has portions that are flat and/or conical in profile, a fixing member 11 that is secured to the external surface of the component and has a female location feature 17 and apertures 9 and 16, and fixing screws 8 and 13 that go through the apertures (FIG. 1, 2a-c, and 6) and secure the component to a second component. One of the fixing screws 8 is external to the surface of the component (FIG. 1).

Regarding Claim 25: Hauser et al. teaches that the component is a prosthetic ball and socket joint cup, specifically an acetabular cup (abstract).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al. (U.S. Patent No. 5,549,692) as applied to claim 1 above and further in view of Pappas (U.S. Patent No. 6,475,241).

Hauser et al. teaches the basic fixing assembly as applied above.

Regarding Claim 8 and 9: Hauser et al. does not teach that the male feature has a slit. However, White et al. teaches a fixing member with a male feature that has slots 241/notches 243/slits (10:20-30 and FIG. 13a-b). Hauser et al. and White et al. are

combinable because they are from the same field of endeavor, namely, hip prostheses. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the male feature taught by Hauser et al. with the slits taught by White et al., and one would have been motivated to do so in order to provide a mechanism for tightening the spike (10:25-30 and 10:50-61).

Regarding Claims 10 and 12 Hauser et al. also does not teach that the slit extends radially from the aperture. However, White et al. teaches a notch/slit 243 that extends radially from the aperture in a plane that is perpendicular to the axis of the aperture (FIG. 13b). At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the male feature taught by Hauser et al. with the radial slits taught by White et al., and one would have been motivated to do so to provide a mechanism for tightening the spike (10:25-30 and 10:50-61).

Regarding Claim 11: Hauser et al. does not teach a slit that is formed in a plane that is substantially parallel to axis of aperture. However, White et al. teaches a slot/slit 241 that is formed in a plane that is substantially parallel to axis of aperture. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the male feature taught by Hauser et al. with the longitudinal slits taught by White et al., and one would have been motivated to do so to provide a mechanism for tightening the spike (10:25-30 and 10:50-61).

Regarding Claim 16: Hauser et al. teaches that the fixing screw 8 has a thickened portion.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al. (U.S. Patent No. 5,549,692) as applied to claim 1 and 7 above and further in view of Pappas (U.S. Patent No. 6,475,241).

Hauser et al. teaches the basic fixing assembly as applied above.

Hauser et al. does not teach that the male feature is made of a resiliently deformable material. However, Pappas et al. teaches a male feature 430 which is made of plastic/a resiliently deformable material (6:25-31). Hauser et al. and Pappas et al. are combinable because they are from the same field of endeavor, namely, joint prostheses. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to modify the male feature taught by Hauser et al. with the deformable material taught by Pappas et al., and one would have been motivated to do because a plastic/metal interface is less likely to slide and create debris which would cause inflammation than certain other types of interfaces.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al. (U.S. Patent No. 5,549,692) as applied to claim 1 above and further in view of Gustilo et al. (U.S. Patent No. 6,162,257).

Hauser et al. teaches the basic fixing assembly as applied above.

Hauser et al. does not teach that the component has a circumferential groove. However, Gustilo et al. teaches a similar device with a circumferential groove (FIG. 8). Hauser et al. and Gustilo et al. are combinable because they are from the same field of endeavor, namely, hip prostheses. At the time of the invention, it would have been

obvious to a person having ordinary skill in the art to modify the surface of the component taught by Hauser et al. with the circumferential groove taught by Gustilo et al., and one would have been motivated to do so in order to provide a mechanism for securing the inner layer of the acetabular cup 160 to the outer layer (FIG. 7).

Other prior art considered applicable to the instant claims but not used in these rejections can be found in the enclosed document entitled "Notice of References Cited".

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda H. Walker whose telephone number is (571)270-3296. The examiner can normally be reached on 9-4, M-Th, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 4134

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHW  
10-4-07



MARK EASHOO, PH.D.  
SUPERVISORY PATENT EXAMINER

151 Oct 07